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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/336,091	Applicant(s) Van Snick et al.
	Examiner Ron Schwadron, Ph.D.	Art Unit 1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 8/31/2001

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 2,5,7,9,14,16,18,21,23,29,33,37,43,50,57,61,68,72,76-83 is/are pending in the application.

4a) Of the above, claim(s) 16,18,21,23,29,33,37,43,50,57,61,68,72 is/are withdrawn from consideratio

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2,5,7,9,14,76-83 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☐ All b)☐ Some* c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☐ Notice of References Cited (PTO-892)

16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

18)☐ Interview Summary (PTO-413) Paper No(s). _____

19)☐ Notice of Informal Patent Application (PTO-152)

20)☐ Other:

1. Claims 2,5,7,9,14,76-83 are under consideration. Claims 1 and 11 have been cancelled. Claims 2,5,7,9,76,81,82 have been amended.

RESPONSE TO APPLICANTS ARGUMENTS

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2,5,7,9,14,76-83 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants arguments have been considered and deemed not persuasive.

The specification does not provide adequate written description of the claimed invention. The legal standard for sufficiency of a patent's (or a specification's) written description is whether that description "reasonably conveys to the artisan that the inventor had possession at that time of the. . .claimed subject matter", Vas-Cath, Inc. V. Mahurkar, 19 U.S.P.Q.2d 1111 (Fed. Cir. 1991). In the instant case, the specification does not convey to the artisan that the applicant had possession at the time of invention of the claimed peptides/composition containing said peptides.

The instant claims encompass functional variants of MAGE A1 peptides that bind a HLA class II molecule. The claims recite that the variant comprises one amino acid addition,

substitution or deletion. In view of the comprising language used, the claim encompasses variants with more than one amino acid addition, substitution or deletion. In addition, the "functional variant thereof" recited in line 5 of claim 1 is not limited to the functional variant of lines 2-3, it encompasses any functional derivative. The claims encompass variant peptides that bind HLA class II. The art recognizes that there are at least 150 different allotypes of MHC class II found in humans, wherein said allotypes would potentially bind different variants of SEQ. ID. no. 7 because the art recognizes that different MHC class II allotypes bind different amino acid sequences. The specification discloses one amino acid sequence (eg. SEQ. ID. No:7) which binds 1 HLA MHC class II allotype. The specification provides no disclosure as to what amino acid(s) could be changed and permit binding of a variant to the at least 149 other known MHC class II allotypes. As stated above, the claims recite that the variant comprises one amino acid addition, substitution or deletion and therefore the claim encompasses variants with more than one amino acid addition, substitution or deletion. Thus, the claims potentially encompass variants with no amino acids derived from SEQ. ID. No:7 which bind any of 149 MHC class II allotypes wherein there is no disclosure in the specification as to the identity of said peptides. Even to the extent that the claims encompass a variant with one amino acid substituted or deleted, the claims still encompass any variant wherein said variant binds to 149 MHC class II molecules wherein there is no disclosure in the specification as to the identity of seqeunces which bind said 149 other MHC class II molecules. The claims encompass any variant of SEQ. ID. no:7 (as per recited in the claims) which binds any of 149 MHC class II allotypes wherein there is no disclosure in the specification of any amino acid sequence which binds said 149 MHC class II. The specification is limited to the description of one amino acid sequence which binds one known MHC class II molecule. The art recognizes that the other 149 MHC class II molecules would probably not bind SEQ. ID. no.7, but might bind various variants of said sequence which have one or more substitutions or addition or deletion. Thus, the written description provided in the specification is not commensurate with the scope of the claimed inventions. In view of the aforementioned problems regarding description of the claimed invention, the specification does not provide an adequate written description of the invention claimed herein. See The Regents of the University of California v. Eli Lilly and Company, 43 USPQ2d 1398, 1404-7 (Fed. Cir. 1997). In University of California v. Eli Lilly and Co., 39 U.S.P.Q.2d 1225 (Fed. Cir. 995) the inventors claimed a genus of DNA species encoding insulin in different vertebrates or mammals, but had only described a single species of cDNA which

encoded rat insulin. The court held that only the nucleic acids species described in the specification (i.e. nucleic acids encoding rat insulin) met the description requirement and that the inventors were not entitled to a claim encompassing a genus of nucleic acids encoding insulin from other vertebrates, mammals or humans, id. at 1240. In the instant case, the specification has disclosed a specific MAGE A1 peptide that binds a single allele of human DR wherein at least 150 different alleles of human DR are known. The Federal Circuit has held that if an inventor is "unable to envision the detailed constitution of a gene so as to distinguish it from other materials. . .conception has not been achieved until reduction to practice has occurred", Amgen, Inc. v. Chugai Pharmaceutical Co, Ltd., 18 U.S.P.Q.2d 1016 (Fed. Cir. 1991). Attention is also directed to the decision of The Regents of the University of California v. Eli Lilly and Company (CAFC, July 1997) wherein is stated: The description requirement of the patent statute requires a description of an invention, not an indication of result that one might achieve if one made that invention. See In re Wilder, 736 F.2d 1516, 222 USPQ 369, 372-373 (Fed. Cir. 1984) (affirming rejection because the specification does "little more than outlin[e] goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate."). Accordingly, naming a type of material generally known to exist, in the absence of knowledge as to what that material consists of, is not a description of that material.

Thus, as we have previously held, a cDNA is not defined or described by the mere name "cDNA," even if accompanied by the name of the protein that it encodes, but requires a kind of specificity usually achieved by means of the recitation of the sequence of nucleotides that make up the cDNA. See Fiers, 984 F.2d at 1171, 25 USPQ2d at 1606.

Claims 76,77,81,82 would not be included in this rejection if rewritten as independent claims.

Regarding applicants comments, the instant claims are not limited to fragments of a known protein. They encompass unknown functional variants that are not disclosed in the specification wherein the peptides can bind to 150 possible different MHC class II molecules, wherein said MHC class II molecules could bind sequences other than SEQ. ID. no.7 and wherein the specification discloses a single amino acid sequence that binds a single MHC class II allotype.

4 Regarding the term "isolated" as per recited in the claims, said term is interpreted as per the definition of said term in the specification, page 12, lines 12-24. Regarding the language of

claim 2 and 9, said claims recite that the variant comprises one amino acid addition, substitution or deletion. In view of the comprising language used, the claim encompasses variants with more than one amino acid addition, substitution or deletion. In addition, the "functional variant thereof" recited in line 5 of claim 1 is not limited to the functional variant of lines 2-3, it encompasses any functional variant. Regarding the recitation of "consisting essentially", said language is considered "open" with regards to the presence of additional amino acids in the instant peptide.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6 Claims 2,9,76,80,81,82 stand rejected under 35 U.S.C. 102(b) as being anticipated by Fikes et al. (WO 95/04542) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Fikes et al. teach a peptide comprising SEQ. ID. no. 7 (see page 14, last paragraph to page 16 and claim 8, wherein said vector produces the peptide comprising SEQ. ID. no. 7). Said peptide is derived from MAGE A1 (alias MAGE 1). It is an inherent property of the SEQ. ID. no. 7 portion of said peptide that it binds HLA class II. Said peptide also contains a MAGE 1 HLA class I binding peptide (eg. it is a polytope polypeptide). Regarding claim 82, said claim encompasses a peptide than contains other amino acid sequences (eg. at least an additional class I binding peptide). Therefore, the peptide taught by Fikes et al., page 14 has a peptide that consists of SEQ. ID. No. 7.

Regarding applicants comments, in view of the interpretation of claims 2 and 9 as per paragraph 4 of this Office Action, the rejection is maintained.

7. Claims 2,9,80 stand rejected under 35 U.S.C. 102(b) as being anticipated by Topalian et al. (WO 97/11669) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Topalian et al. teach a peptide derived from MAGE-1 which binds MHC class II (see claims 61, 57-60 and pages 8,28 and 29). Said peptide can also contain a HLA class I binding peptide derived from MAGE 1(eg. it is a polytope polypeptide, see page 27, last paragraph, continued on next page). Topalian et al. teach a peptide that is a functional variant of the peptide recited in claim 2 (see claim 2, wherein said peptide binds MHC class II and stimulates T cells).

Regarding applicants comments, Topalian et al. teach a peptide that is a functional variant of the peptide recited in claim 2 (see claim 2, wherein said peptide binds MHC class II and stimulates T cells).

8. Claim 2 stands rejected under 35 U.S.C. 102(a) as being anticipated by Chaux et al. for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Chaux et al. teach a peptide derived from MAGE-1 which binds MHC class II (see page 774, column 1, first paragraph). Said peptide is a functional variant of the peptide recited in claim 2 because it binds MHC class II and stimulates T cells.

Regarding applicants, the peptide taught by Chaux et al. is also found in MAGE-1 (see page 774, column 1, first paragraph). Regarding applicants comments about what the peptide of claim 2 encompasses, paragraph 4 of this Office Action discloses the Examiners interpretation of the scope of claim 2.

9. Claims 2,5,7,9,14,78-80,83 stand rejected under 35 U.S.C. 102(a) as being anticipated by Thielemans et al. (WO 99/14326) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Thielemans et al. teach a functional variant of the peptide of claim 2 which binds MHC class II and stimulates T cells (see claim 4). Thielemans et al. teach that said peptide can comprise a Ii chain derived endosomal targeting signal (see claim 7). Thielemans teach that said peptide can comprise a D-amino acid (see claim 9). Thielemans et al. teach that said peptide can be conjugated to a MAGE 1 class I binding peptide (see Table 1 and pages 27-29).

Regarding applicants comments, Thielemans et al. teach a peptide that is a functional variant of the peptide recited in claim 2.

10. Claims 2,5,7,78,79 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaux et al. (US Patent 5,965,535) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Chaux et al. teach a functional variant of the peptide of claim 2 which binds MHC class II and stimulates T cells (see claim 3). Chaux et al. teach that said peptide can comprise a Ii chain derived endosomal targeting signal (see column 14). Chaux et al. teach that said peptide can comprise a D-amino acid (see claim 9). Chaux et al. teach that said peptide can be conjugated to a MAGE 1 class I binding peptide (see Table 1 and pages 27-29).

Applicants arguments have been addressed in the other art rejections.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 2,9,76,77,80-82 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fikes et al. (WO 95/04542) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Fikes et al. teach a peptide comprising SEQ. ID. no. 7 (see page 14, last paragraph to page 16 and claim 8, wherein said vector produces the peptide comprising SEQ. ID. no. 7). Said peptide is derived from MAGE A1 (alias MAGE 1). The SEQ. ID. no. 7 portion of said peptide binds HLA class II. Said peptide also contains an HLA class I binding peptide (eg. it is a polytope polypeptide). Regarding claim 82, said claim encompasses a peptide than contains other amino acid seqeunces (eg. at least an additional class I binding peptide). Therefore, the peptide taught by Fikes et al., page 14 has a peptide that consists of SEQ. ID. No. 7. Fikes et al. do not teach

the peptide of claim 77. Fikes et al. teach a peptide that contains all of the amino acids of SEQ. ID. No. 7 except the first and last two amino acids (see claim 3). Fikes et al. teach that the peptide can include additional amino acids at both ends (see page 5, penultimate paragraph). Fikes et al. teach that the peptide can be less than 15 amino acids. Fikes et al. teach the MAGE I residues that flank both sides of the peptide recited in claims 3 (see page 4, last paragraph). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Fikes et al. teach a peptide that contains all of the amino acids of SEQ. ID. No. 7 except the first and last two amino acids and that the peptide can include additional amino acids at both ends and can be less than 15 amino acids. One of ordinary skill in the art would have been motivate to do the aforementioned because Fikes et al. teach that the peptide can include additional amino acids at both ends and that the peptide can be less than 15 amino acids.

Regarding applicants comments, Fikes et al. teach a peptide that contains all of the amino acids of SEQ. ID. No. 7 except the first and last two amino acids (see claim 3). Fikes et al. teach that the peptide can include additional amino acids at both ends (see page 5, penultimate paragraph). Regarding applicants comments about motivation to make the claimed peptide, Fikes et al. teach:

"The peptide can be optionally flanked and/or modified at one or both of the N- and C-termini, as desired, by amino acids from MAGE sequences, particularly MAGE-1, amino acids added to facilitate linking, other N- and C-terminal modifications, linked to carriers, etc., as further described herein.". In addition, Fikes et al. also specifically disclose that the peptide is less than about 15 residues (see page 5, last paragraph). Regarding applicants comments about Fikes et al. and "should" versus "can be", Fikes et al. teaches the claimed invention for the reasons elaborated above.

13. Claims 5,14,78,83 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fikes et al. (WO 95/04542) as applied to claims 2,9,76,77,80,81 above, and further in view of Sanderson et al. for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

The previous rejection teaches the claimed invention except for use of a Ii chain derived endosomal targeting signal. Fikes et al. teach MAGE 1 peptide conjugates containing a MAGE 1 class binding peptide and a MAGE 1 class II binding peptide (see page 12, last paragraph). Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used to efficiently target a peptide for MHC class II binding/T cell recognition (see abstract). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Fikes et al. teach MAGE 1 peptide conjugates containing a MAGE 1 class binding peptide and a MAGE 1 class II binding peptide while Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used to efficiently target a peptide for MHC class II binding/T cell recognition. One of ordinary skill in the art would have been motivate to do the aforementioned because Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used to efficiently target a peptide for MHC class II binding/T cell recognition.

Applicants arguments are addressed in paragraph 12 of this Office Action.

14. Claims 2,5,9,14,78,80,83 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Topalian et al. (WO 97/11669) in view of Sanderson et al. for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Topalian et al. teach a peptide derived from MAGE-1 which binds MHC class II (see claims 61, 57-60 and pages 8,28 and 29). Said peptide can also contain a HLA class I binding peptide derived from MAGE 1(eg. it is a polytope polypeptide, see page 27, last paragraph, continued on next page). Topalian et al. teach a peptide that is a functional variant of the peptide recited in claim 2 (see claim 2, wherein said peptide binds MHC class II and stimulates T cells). Topalian et al. do not teach a peptide that has a Ii chain derived endosomal targeting signal. Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used to efficiently target a peptide for MHC class II binding/T cell recognition (see abstract). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Topalian et al. teaches the claimed peptides except for a peptide that has a Ii chain derived endosomal targeting signal, while Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used

to efficiently target a peptide for MHC class II binding/T cell recognition. One of ordinary skill in the art would have been motivate to do the aforementioned because Sanderson et al. teach that addition of a Ii chain derived endosomal targeting signal to a peptide can be used to efficiently target a peptide for MHC class II binding/T cell recognition.

Regarding applicants comments, Topalian et al. teach a peptide that is a functional variant of the peptide recited in claim 2 (see claim 2, wherein said peptide binds MHC class II and stimulates T cells).

15. Claims 7,79 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fikes et al. (WO 95/04542) as applied to claims 1,2,9,11,76,77,80-82 above, and further in view of Gelder et al. (US Patent 6,043,347) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

The previous rejection teaches the claimed invention except for a peptide containing D-amino acids. Gelder et al. teach modified peptides containing D-amino acids (see column 20) and that such peptides have increased stability (see column 20). Said peptides would also be non-hydrolyzable because D-amino acid modified peptides have this property (eg. see claim 7 upon which claim 79 depends). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Fikes et al. teach the claimed peptide except for D-amino acid modification, while Gelder et al. teach modified peptides containing D-amino acids (see column 20) and that such peptides exhibit increased stability. One of ordinary skill in the art would have been motivate to do the aforementioned because Gelder et al. that teach modified peptides containing D-amino acids have increased stability.

Applicants arguments have been addressed in the other prior art rejections.

16. Claims 1,2,5,9,11,14,78,80,83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Topalian et al. (WO 97/11669) in view of Gelder et al. (US Patent 6,043,347) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

Topalian et al. teach a peptide derived from MAGE-1 which binds MHC class II (see claims

61, 57-60 and pages 8,28 and 29). Said peptide can also contain an HLA class I binding peptide derived from MAGE 1(eg. it is a polytope polypeptide, see page 27, last paragraph, continued on next page). Topalian et al. teach a peptide that is a functional variant of the peptide recited in claim 2 (see claim 2, wherein said peptide binds MHC class II and stimulates T cells). Topalian et al. do not teach a peptide containing D-amino acids. Gelder et al. teach modified peptides containing D-amino acids (see column 20) and that such peptides increased stability (see column 20). Said peptides would also be non-hydrolyzable because D-amino acid modified peptides have this property (eg. see claim 7 upon which claim 79 depends). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Topalian et al. teach the claimed peptide except for D-amino acid modification, while Gelder et al. teach modified peptides containing D-amino acids (see column 20) and that such peptides increased stability. One of ordinary skill in the art would have been motivate to do the aforementioned because Gelder et al. that teach modified peptides containing D-amino acids have increased stability.

Applicants arguments have been addressed in the other prior art rejections.

17. No claim is allowed.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Papers related to this application may be submitted to Group 1600 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Papers should be faxed to Group 1600 at (703) 308-4242.

20. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Dr. Ron Schwadron whose telephone number is (703) 308-4680. The examiner can normally be reached Monday through Thursday from 7:30 to 6:00. A message may be left on the examiners voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Ms Christina Chan can be reached on (703) 308-3974. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703) 308-0196.

RONALD B. SCHWADRON
PRIMARY EXAMINER
GROUP 1800 1600

Ron Schwadron, Ph.D.
Primary Examiner
Art Unit 1644